# DECISION PROCESS COORDINATING GROUP MEETING NOTES

# November 20, 1997, 10:30 a.m.-4 p.m. NATIONAL MARINE FISHERIES SERVICE OFFICES PORTLAND, OREGON

## I. Greeting and Introductions.

The November 20 meeting of the Decision Process Coordinating Group, held at the National Marine Fisheries Service's offices in Portland, Oregon, was chaired by NMFS consultant Ed Sheets. The agenda for the November 20 meeting and a list of attendees are attached as Enclosures A and B. The following is a distillation (not a verbatim transcript) of items discussed at the meeting, together with actions taken on those items.

# I. Greetings and Introductions.

Sheets welcomed everyone to the meeting, led a round of introductions and a review of the agenda. These formalities concluded, Sheets moved onto the first substantive agenda item for today's meeting.

II. Review of Recommendations to the Implementation Team and Executive Committee.

I am supposed to give a status report on our activities to the Executive Committee tomorrow, said Sheets, distributing Enclosure C, a document titled "Working Draft Recommendations from the Decision Process Coordinating Group on a Process for Columbia River Basin Fish and Wildlife Restoration Decisions," dated November 15, 1997. The group spent a few minutes going through this document, helping to clarify what Sheets will be presenting to the Executive Committee. A few minor changes were made to this document, and are noted in the text of Enclosure C.

PATH coordinator Dave Marmorek offered a detailed set of comments to this document, attached as Enclosure D. Chris Toole of NMFS suggested that, under the "Decision Analysis" section on page 3, some language be added to address the idea of recovery standards as a filtering mechanism for the alternatives under analysis -- that, to warrant further consideration, a given alternative must show a 70 percent probability of recovery for 80 percent of the index stocks under a wide range of assumptions, for example. The group discussed various specific levels of recovery probability; after some minutes of discussion, the "decision analysis" paragraph was rewritten as follows:

"The group evaluated the feasibility of utilizing decision analysis tools in this process. The group was able to identify clear biological performance measures. The specific threshold levels need to be addressed by policy makers -- for example, the probability of avoiding jeopardy, achieving recovery and allowing various levels of harvest. Alternatives that score high on the performance measures should be the primary focus for the evaluation of economic, social and other effects. The biological information

generated will show which alternatives meet various levels of certainty in achieving the performance measures. It will be up to the policy makers to decide what level of risk they are jointly willing to accept."

Sheets suggested some additional wording, to help clarify the above paragraph for nontechnical readers:

"There is not agreement on minimum criteria; NMFS used one threshold in its analysis in the 1995 Biological Opinion, but other parties believe different threshold survival levels may be more appropriate. This decision process is intended to provide information that each of the parties in the region can use to evaluate the performance of various alternatives against their specific criteria."

Various meeting participants expressed support for Sheets' additional wording.

The discussion of the decision process goals and criteria continued for some minutes, and spilled over into the question of how to develop a decision process that will accommodate the various, sometimes-conflicting outcomes desired by different parties in the region -- for example, NMFS's mandate to avoid jeopardy by restoring the stocks to naturally-sustaining levels, and the tribes' desire to achieve a significant harvestable surplus. David Arthaud of the Shoshone-Bannock Tribes suggested that it would be appropriate to include a section detailing each party's desired future condition. After some minutes of further discussion, Sheets agreed to try to draft such a section for incorporation into the next iteration of this paper.

Moving on, the group devoted a lengthy discussion to the "Scope" section of Enclosure C. In particular, they discussed the need for greater clarity about the scope of the decision and the process for the decision, as well as legal issues surrounding the interactions between the various statutory authorities (Endangered Species Act, Northwest Power Act, COE operating authorities) the ultimate decision will have to satisfy. It was agreed to form a DPCG subgroup, to include Lynn Krasnow, Chris Toole and Mark Eames of NMFS, Greg Graham and a COE legal representative, state, tribal and Council representatives and anyone else who wishes to participate, to discuss these concepts. Arthaud said the Sho-Ban tribes will also want to participate in this subgroup meeting; Rob Lothrop of CRITFC was also suggested as a participant. The subgroup will try to develop some recommendations for further discussion at the next full meeting of the Decision Process Coordinating Group.

Sheets asked that any further comments on the draft Recommendations Paper (Enclosure C), as well as any additional work products noted in the text, be submitted to him by December 1. Once these are received, Sheets said, I will incorporate them into a new draft of the document, for review at the next DPCG meeting.

In response to a question, Marmorek said PATH has no plans to incorporate lamprey effects into its analysis; after a brief discussion, Sheets said lamprey effects will be analyzed either by CBFWA or the Fish and Wildlife Service, in the course of the evaluation of effects on all other fish and wildlife.

III. Status Report on PATH and DREW.

No PATH and DREW updates were presented at today's meeting.

IV. Discussion of What We Will and Will Not Know from the Biological Analyses.

SCT co-chair Bill Hevlin briefly recapped the discussion of John Day Drawdown at yesterday's SCT meeting. He distributed Enclosure E, the Corps's draft Project Study Plan for John Day Drawdown, Phase I. This is essentially a study proposal, he said; we wanted to discuss it with you today because there is a very short time line for comments -- the Corps has only 90 days to present its report to Congress. One of the most important aspects of this proposal, Hevlin said, is the coordination with PATH of the elements in the Drawdown study. We thought this would be an opportune time to ask you to coordinate any comments you might have with your SCT representatives; all substantive comments are due to the Corps by December 1.

COE's John Ferguson provided a brief overview of the John Day Drawdown project study plan, explaining that the goal of this effort is to tell Congress how the Corps proposes to study John Day Drawdown. The Corps's goal is to provide this recon-level report to Congress by Jan. 9. Phase I will be an 18-month study, scheduled to start Oct. 1, 1998 and completed in early April 2000. That means the only available field season for the Phase I analysis will be 1999. Ferguson distributed Enclosure F, a series of overheads laying out the specific items, alternatives and impacts to be analyzed in Phases I and II of the John Day Drawdown study (please see this enclosure for details of Ferguson's presentation). The main thing we would like your comment on, he said, is whether or not we've scoped this correctly.

The main biological research tasks the Corps is proposing to do in Phase I of the study include:

- ? Analysis of the effects of John Day Drawdown on juvenile salmonids
- ? A PIT-tag study focused on changes in juvenile travel time and survival through John Day pool
- ? An analysis of the potential effects of Drawdown on adult salmonid spawning
- ? Completion of the resident fish and wildlife and benthic habitat studies begun in 1996.

(Please see pp. 28-29 of Enclosure E for a more detailed description of this proposed work). Some concern was expressed about the length of time involved in starting and completing Phase I of the study; Hevlin explained that there is \$500,000 in the FY'98 CRFM budget for the John Day Drawdown study, but no further money can be spent on this project without Congressional approval. I think most of you are aware of the difficulties we have had just to get Congressional approval to go forward with this 90-day scoping document, he said. Part of the reasoning for going with a phased approach to this study is the fact that the cost of a recon-level investigation will be considerably less than the cost of a comprehensive feasibility study -- I think Congress is much more likely to grant the necessary approvals if we adopt this approach, he said.

Again, the questions we would like you to consider are, first, whether you see any fatal flaws in the proposed Phase I approach, and second, whether there is something else we could be doing to strengthen the information Phase I will produce, said Ferguson. Please provide any feedback you may have to your SCT representative, he said.

Moving onto the main part of this agenda item, Sheets said NMFS has been putting together briefing materials for presentation to the administration in Washington, D.C. on the current

thinking, at least within NMFS, on the current status of the science supporting the 1999 decision, and where that science is heading. I thought it would be a good idea to ask Brian Brown to give us the same briefing he has given to the assistant Secretaries of State in Washington, Sheets said, because there have been a lot of questions about what NMFS is currently thinking.

During a recent trip to Washington, D.C., I spent about 20 minutes going through this at the assistant Secretary of State level, Brown began. There were very few questions; the feedback I got after the meeting indicated that the reaction was that either this is an issue they need to begin to pay closer attention to, so that they can understand it better, or they need to stay out of it altogether -- it's not an issue they can simply dabble in.

Brown then went through a series of overheads, titled "1999 Decisions -- Status of Evaluations." These overheads, and the gist of Brown's presentation, are reproduced in Enclosure G. I understand that there is some sensitivity to this presentation, he began; I also understand that parts of it probably are not as balanced as they could be, and part of my purpose today is to get some feedback from this group.

Brown touched on some of the evaluations that are currently underway in support of the 1999 decision (juvenile reach survival estimates, transport evaluations, surface collection, gas abatement, PATH), as well as some of the specific results to date from the reach survival study (for example, that spring/summer chinook mortality measured in the Snake River varied from 8%

to 13% per project over five years) and the transport study (partial returns from 1995 showed that transported fish survived to adulthood at about twice the rate of in-river fish). Please see Enclosure G for details of Brown's presentation. Brown also touched on PATH's work with smolt-to-adult return rates, using historical data to estimate SARs at Ice Harbor dam in the 1960s and adjusting those results to take into account modern harvest rates and the existence of three more Snake River dams. The bottom line is that PATH now estimates that, at least as an interim goal, SARs in the 2% to 6% range are

necessary to support survival and recovery. Based on partial returns of 1995 releases, NMFS is projecting an SAR for wild transported fish of around 2%. The comparable projection for hatchery fish is 0.5%. This estimate is for spring/summer chinook only, Brown added.

Various DPCG participants cautioned that these numbers represent partial results from one year of study only. Brown agreed that this portion of his presentation is only a projection, adding that some would suggest that it is a wildly optimistic projection. I would qualify that even further, he said, by saying that 1995 was a very good year, in terms of in-river conditions, relative to the previous decade. You also need to bear in mind that we have seen a response, in both transported and non-transport groups, between high-flow years and low-flow years, Brown continued -- in years like 1995, when flow conditions are better, both groups survive better. The bottom line is, this is about as good as you're going to do in terms of survival, if you believe this data, he said.

Brown also touched on surface collector studies, including results to date as well as planned testing in 1998; results from recent gas abatement studies; the PATH process (work products and schedule); some of the alternative scenarios currently under PATH consideration (1. Expanded transportation 2. Transportation plus 3. Snake River dams to natural river 4. Snake River dams to natural river and John Day to spillway crest 5. Snake River and John Day dams to

natural river 6. John Day dam to spillway crest 7. John Day dam to natural river.).

Under the "PATH -- Work Products" section of Brown's presentation, Marmorek made the point that, when referring to the analysis of alternative harvest, habitat and hatchery actions, it is inaccurate to say that PATH is analyzing these specific actions in the same way that it is analyzing hydro system actions. What we are actually doing it is analyzing the sensitivity of the response of fish to hydro system actions given the uncertainties in harvest, habitat and hatcheries, he said.

Brown also touched on one of the key uncertainties PATH is grappling with, which he expressed as follows:

- ? Retrospective analysis of 1950s-1990s spring/summer chinook data compared the productivity of Snake River stocks to lower river stocks
- ? After accounting for stock-specific productivity factors, directly measurable mortality, and annual variation common to all stocks, there was another mortality factor that increased in the mid-1970s and affected Snake River, but not lower river, stocks.
- ? The cause of this "extra" or "delayed" mortality is unknown.

Brown laid out the key alternative hypotheses PATH is currently considering with regard to the delayed mortality question:

- ? Hypothesis 1: mortality is unrelated to dams, and may persist regardless of dam modification (e.g. could be disease)
- ? Hypothesis 2: mortality is unrelated to dams as in #1, but specifically linked to cyclical climate change.
- ? Hypothesis 3: mortality is caused by passage through the hydro system, including passage with transportation.

Brown pointed out that these are only three of the key alternative hypotheses PATH is currently considering, adding that PATH is not just about answering these three questions. Tom Cooney of WDFW emphasized that there is a temporal component to these three hypotheses, and there is also the fact that this agent, whatever it may be, is unique to the Snake River stocks. Whatever hypothesis is chosen is going to have to explain why it is unique to the Snake River stocks, he said.

Moving on, Brown summarized some of the arguments for and against the delayed mortality due to dams hypothesis; he touched on how this range of explanations could affect the results of analysis. Brown also highlighted some of the things the region currently does and does not know about Drawdown:

- ? If four Snake River dams are removed, we can expect to eliminate most measurable mortality -- 28%-43% juvenile mortality; 15% adult mortality.
- ? Assuming a remaining Snake River mortality about 5%-15% for juveniles and 3% for adults, this would be an improvement of 50%-70% over present in-river conditions.
- ? If there is a delayed mortality due to dams, then the improvement would be greater.

Brown went on to summarize the additional information. NMFS expects the region will have to support the 1999 decision, as well as the additional information that will not be available to

support the 1999 decision (see pp 24-25 of Enclosure G). He touched on some of the factors that will have to be used in weighing the evidence for both SARs and model projections:

# SARs:

## Strength:

? Relatively simple, direct, empirical measurement

#### Weakness:

- ? Not available for all alternatives
- ? Wills have only two years by 1999, both with good water conditions
- ? Uncertainty about the 2%-6% goal

# Model projections:

# Strength:

- ? Comparable evaluation of each alternative
- ? Uses more of what is known
- ? Addresses broader range of environmental variability
- ? Linked to jeopardy standard.

#### Weakness:

- ? Complex
- ? Uncertainty about delayed mortality, no research identified
- ? Difficulty weighing information collected under different conditions

Brown also touched on the lack of information for fall chinook and steelhead, on what the flow/survival relationship data shows during the spring and summer periods, and, finally, on the key scientific issues that remain to be addressed:

- ? Weighing the evidence
- ? Delayed mortality
- ? Smolt-to-adult return rates
- ? Lack of information on fall chinook and steelhead
- ? Flow/survival relationship
- ? The "normative river" concept.

If anyone would like Brian to come to a future meeting to discuss these concepts further, I'm sure he would be happy to do so, said Sheets. Again, comments on the Recommendations document are due to me by December 1.

#### V. Discussion of Mainstem Alternatives.

It was agreed to defer discussion of this topic to the next DPCG agenda.

VI. Next Meeting Date and Agenda Items.

The next meeting of the Decision Process Coordinating Group was set for Tuesday, December 16 from 10:30 a.m. to 4:00 p.m. at the Columbia River Inter-Tribal Fish Commission offices in Portland, Oregon. Meeting notes prepared by Jeff Kuechle, BPA contractor.